Oak Bay Deer Program Proposal

Prepared by:

Urban Wildlife Stewardship Society

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Purpose:

The purpose of this document is to outline projects proposed by the Urban Wildlife Stewardship Society. The society believes that completing the comprehensive program outlined in this proposal would result in an urban deer management regime that would be a standard for the province and beyond. The scope of the program launched in 2016 will be dependent on available funding.

Context:

The Urban Wildlife Stewardship Society (UWSS), created in April, 2015, is a not-for-profit society constituted under the BC Society Act. The members of the society are residents of Oak Bay and include present and former educators, retired biologists, civil servants and working professionals. The objectives of the society are:
- To develop, and deliver, in partnership with other like-minded organizations, a science-based alternative to lethal deer culls;
- To develop and deliver a public education program to reduce human-deer conflict;
- To gather scientific information that will contribute to the understanding of urban deer ecology; and,
- To showcase what is possible when the community works together and think long-term and ethically about how humans co-exist with wildlife.

Significant accomplishments by the UWSS in 2015:
- Created an active website (http://www.deerplanoakbay.ca/) and twitter account;
- Received full and public endorsement from the BC SPCA;
- Created a Scientific Advisory Group (SAG) with scientists and educators from the University of Victoria and Camosun College. The role of the SAG is to provide scientific oversight of the Oak Bay deer program;
- Made presentations to the CRD and other local governments to explain a humane, sustainable, and economical alternative to lethal culls;
- Designed and distributed 350 "Caution – Expect Deer" and "Caution-Fawns Crossing" roadside signs;
- Raised public awareness, through media releases, interviews, Op-eds and letters, of the importance of human behavior when living with wildlife in an urban area;
- Raised $20,000 from the community;
- Have an application under secondary review with CRA for status as a registered charity;
- Conducted a workshop on ways to reduce human-deer conflict;
- Applied for the necessary provincial and federal permits to live-trap and inoculate does with SpayVac®, an immunocontraceptive vaccine
- Secured 50 doses of SpayVac®
- Initiated a photo inventory of Oak Bay deer; and
- Participated in a CRD inventory of deer in Oak Bay.

Proposed projects

The UWSS has developed an ambitious program for 2016, consisting of five distinct but interrelated projects. Following is a brief description for each project, along with the estimated delivery costs for 2016 and beyond (for multi-year projects).

Public education (ongoing project)

Public education is an important component of any deer management program. It can engage the community in a positive and non-divisive manner, reduce human/deer conflict, and build an understanding of roles and responsibilities in managing deer in an urban environment. Public health and safety issues can best be addressed when residents have an understanding of the indigenous black-tailed deer and how to interact with the species, particularly during fawning (spring) and rutting (fall) seasons.

Project description:

Public education needs to be ongoing using a variety of channels. The following strategies would form the basis of a public education project:
- Seasonal ads in the local newspaper
- Varied and seasonal signage which may help prevent collisions that can cause human and deer injury, and vehicle damage
- Speed enforcement on high-collision roadways, in conjunction with ads
- Distribution of information via rack cards and info sheets
- Community presentations facilitated by the UWSS
- School education in partnership with SD61 and local schools (i.e. environment and photography clubs)

$4,500 estimated annual cost

Population modeling: (one year project)

Rationale for project:

A population model for deer in Oak Bay would be used to understand, explain and predict the numbers of deer in the District. It would also be used to establish a population objective, and to provide insights on how that objective could be achieved.

Project description:

An independent contractor, or graduate student, would be hired to develop a population model for deer in Oak Bay. The four necessary components of the model (birth rates, death rates, immigration and emigration) would be estimated from observations and existing

data (e.g., literature, Municipal and ICBC data sources). Data from UWSS projects (e.g. photo inventory, trapping and marking) will be used to refine the model.

$10,000 estimated cost for 2016

Survey of attitudes to deer in Oak Bay (one or two year project)

Rationale for project:

This project would document the concerns, attitudes and interactions of Oak Bay residents with deer, thereby providing information to the mayor, council and other interested parties, on deer management options and expenditures.

Project description:

Oak Bay will be divided into five or more neighbourhoods. A survey questionnaire, consisting of 24 short questions, would be distributed initially to at least 300 households in 2-3 neighborhoods. Responses will be anonymous, but residents will be asked to provide their postal code, allowing responses to be grouped by neighborhood. The project will document:
- The extent of deer activities on homeowners' properties
- Homeowners' responses to the presence of deer
- How concerned residents are about deer on their properties and in Oak Bay generally
- The types of issues that cause concern
- Whether level and types of concerns vary by neighborhood within the District.

This project is scalable, so could be expanded to include all Oak Bay residences, if this initial survey indicates significant value in a more comprehensive approach.

$16,000 for 2016

$30,000 for 2017 (if the decision is made to survey all residences)

Deer Abundance Estimation (5 year project):

Rationale for project:

Knowing the population of deer in Oak Bay, within defined confidence limits, is a critical first step in the management of any species. Estimates of population size and rate of growth that are scientifically based, rather than stemming from public perception, are the only credible and legally defensible estimates upon which sound management can be based. Estimating the population will enable the establishment of a realistic population objective

for the District, and, allow for an assessment of the effectiveness of treatments in reducing that population size.

Project description:

Estimating wildlife abundance from an unmarked (or partially marked) population of individuals that look more or less the same is difficult. How does one distinguish between one animal 20 times, and 20 different animals? Cutting edge new statistical techniques have been developed that use data from remote camera trapping to estimate population size from repeated photographs. This technique has been field tested for white-tailed deer in Alberta, and can be applied to black-tailed deer in Oak Bay. This project will be run by faculty members and students from the University of Victoria.

$30,750 for 2016 (largely due to camera acquisition)

$17,100 for 2017

$10,000 per year for the following 3 years

Live capture, tagging, and inoculation of does with SpayVac® (5 year project):

Rationale for project:

This project is intended to manage deer in Oak Bay to a scientifically defined population objective, without a cull, through the reduction of fawns, by injecting does with SpayVac®, which will render them infertile. It will also provide information on deer movement patterns, and urban deer ecology.

Project description:

Deer will be captured in pre-baited clover traps, physically restrained, and ear tagged. Captured does will be injected with the immunocontraceptive SpayVac®. Citizens will be encouraged to participate in data collection through the sighting and reporting of marked animals. The goal is to vaccinate 50 does in year one and future efforts will be guided by the population model.

$50,000 per year for 5 years